CLAIMS:

What is claimed is:

1. A method for measuring the efficacy of a compound in recoding of a translational reading frame, comprising:

a) inserting a sequence suspected of causing said recoding upstream of an MHC I restricted epitope, said epitope composed so that recoding must take place in order for said epitope to be expressed;

b) recombining step a) into an expression vector thereby allowing for expression of said epitope in an epitope expressing vector;

c) infecting cells expressing an appropriate MHC class I molecule with said epitope expressing vector of step b); and

d) measuring said recoding of said translational reading frame by an activation of said CD8+ T-cells.

2. The method of claim 1, comprising a -1 frameshifting event as said recoding of said translational reading frame.

3. The method of claim 1, comprising a +1 frameshifting event as said recoding of said translational reading frame.

4. The method of claim 1, comprising a stop codon readthrough or redefinition event as said recoding of said translational reading frame.

5. The method of claim 1 wherein said sequence suspected of causing said recoding comprises a sequence in a viral protein.

6. The method of claim 1 wherein said sequence suspected of causing said recoding comprises a sequence in a protein wherein said sequence comprises a point mutation resulting in a premature stop codon, thereby causing a premature termination of said protein.

7. The method of claim 1 wherein said sequence suspected of causing said recoding comprises a sequence in a protein encoded by a gene, said protein influencing proliferation of a cell.

8. A method for measuring whether a test compound is capable of influencing recoding of a translational reading frame, comprising:

a) inserting a sequence suspected of causing said recoding upstream of an MHC I restricted epitope, said epitope composed so that recoding must take place in order for said epitope to be expressed;

b) recombining step a) into an expression vector thereby allowing for expression of said epitope in an epitope expressing vector;

c) infecting a mouse expressing an appropriate MHC class I molecule with said epitope expressing vector of step b);

d) administering said test compound to said mouse;

e) expressing said epitope in said mouse of step d); and

f) measuring an activation of said eptiope specific CD8+ T-cells.

9. The method of claim 8, further comprising magnifying said epitope specific CD8+ T-cells by restimulation *in vitro* with cells expressing said epitope.

10. The method of claim 8, comprising varying an amount of said test compound given to said mouse to detect changes in recoding efficiency.

11. The method of claim 8, comprising a -1 frameshifting event as said recoding of said translational reading frame.

12. The method of claim 8, comprising a +1 frameshifting event as said recoding of said translational reading frame.

13. The method of claim 8, comprising a stop codon readthrough or redefinition event as said recoding of said translational reading frame.

14. The method of claim 8 wherein said sequence suspected of causing said recoding comprises a sequence in a viral protein.

15. The method of claim 8 wherein said sequence suspected of causing said recoding comprises a sequence in a protein wherein said sequence comprises a point mutation resulting in a premature stop codon, thereby causing a premature termination of said protein.

16. The method of claim 8 wherein said sequence suspected of causing said recoding comprises a sequence in a protein encoded by a gene, said protein influencing proliferation of a cell.